Joseph E. Kernan Governor

Gregory A. Wilson, M.D. State Health Commissioner



December 1, 2003

Mr. Joseph Glasser
Eljen Corporation
10 North Main Street, Suite 216
West Hartford CT 06107

Dear Mr. Glasser:

Re:

Eljen In-Drain System Approval for Indiana

The gravelless system for which your corporation submitted information is a subsurface absorption system which provides an alternative to the use of gravel in the absorption field trenches. This is accomplished by the installation of a pre-manufactured structure consisting of a cuspated plastic core covered by a geotextile fabric. This structure is laid on a six inch layer of sand in the absorption field trenches.

In Indiana, this gravelless system may be considered at any site where conventional gravity flow, flood dosed, alternating field, or pressure distribution systems are allowed in accordance with the provisions of Rule 410 IAC 6-8.1 or Rule 410 IAC 6-10, whichever is applicable. It is not for use in areas where subsurface trench systems would be prohibited due to poor permeability, high groundwater, insufficient depth to bedrock or other limiting layer, or other limitations for subsurface aggregate systems.

The use of Eljen In-Drain Type A module as a gravelless system is hereby approved by the Indiana State Department of Health (department) subject to the conditions listed below.

- 1. A permit for each individual system must be obtained from the health department having jurisdiction prior to the construction of the system.
- 2. The Eljen In-Drain System shall be used for residential strength wastewater only.
- 3. All determinations for site suitability and system selection for subsurface soil absorption systems shall be made using procedures and criteria established by Rule 410 IAC 6-8.1 or Rule 410 IAC 6-10, whichever is applicable.
- 4. The absorption field size must be calculated using the design daily flow and the soil loading rates for subsurface absorption systems set by Indiana State Department of Health Rule 410 IAC 6-8.1 or 6-10, whichever is applicable. System size shall be based on total square footage of trench bottom with no down-sizing.
- 5. The minimum trench depth shall be seventeen (17) inches and the maximum trench depth shall be thirty-six (36) inches.
- 6. The sand used in the bottoms of the absorption field trenches shall comply with INDOT Spec. 23.

- 7. The vertical separation distance from trench bottom to a layer with a loading rate of less than twenty-five hundredths (0.25) gpd/ft² shall be at least thirty (30) inches for gravity flow systems and at least twenty-four (24) inches for flood dose and pressure distribution systems.
- 8. The maximum trench width shall be thirty-six (36) inches and the trenches shall be separated by a minimum of seven and one-half (7.5) feet, on center.
- 9. The maximum trench length shall be one hundred (100) feet.
- 10. For gravity flow systems, each soil absorption field trench must be individually connected to a distribution box by at least five (5) feet of gravity effluent sewer which meets the minimum requirements of the department.
- 11. The distal ends of the soil absorption field trenches may not be manifolded together.
- 12. The absorption field trenches and absorption field distribution piping must be level throughout their lengths.
- 13. The distal end of each of each absorption field distribution pipe must be capped with an end cap.
- 14. The absorption field trenches must be covered with a minimum of sixteen (16) inches of soil material. The soil cover must be crowned or sloped over the absorption field so as to promote surface runoff
- 15. The use of the Eljen In-Drain system shall meet all other applicable Indiana State Department of Health standards for residential and commercial subsurface soil absorption systems.

If you have any questions regarding this approval, please contact, Alan Dunn, David Ortel, or Ed Miller of my staff at the above address, by telephone at 317-233-7177, or by e-mail (adunn@isdh.state.in.us, dortel@isdh.state.in.us, emiller@isdh.state.in.us, respectively).

Sincerely,

HOWARD W. CUNDIFF, P. E., DIRECTOR

CONSUMER PROTECTION

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cc: Local Health Departments

Onsite staff